2

AMENDMENTS TO THE CLAIMS:

Claim 1. (Currently amended) A magnetic bearing control device for controlling a magnetic bearing for supporting a rotor in a non-contact manner, said magnetic bearing control device comprising:

a digital processor which controls said magnetic bearing using a magnetic bearing control signal and that generates a command signal in response to outputting said magnetic bearing control signal; and

a counter that starts for accumulating and counting an actual work time of said magnetic bearing in response to receiving said command a designated managed component based upon said magnetic bearing control signal from said digital processor,

wherein said digital processor performs a comparison between the accumulated actual work time of said magnetic bearing the managed component counted by said counter and a preset maintenance time, and outputs a signal indicating a start of a maintenance operation of said magnetic bearing managed component on a the basis of a the result of the comparison.

Claim 2. (Currently amended) The magnetic bearing control device according to claim 1, wherein said digital processor inhibits and the activation of said magnetic bearing control device, after the accumulated actual work time of the managed component counted by said counter exceeds a preset limit time.

Claim 3. (Original) The magnetic bearing control device according to claim 1, wherein said

3

digital processor comprises a function of said counter.

- Claim 4. (Original) The magnetic bearing control device according to claim 2, wherein said digital processor comprises a function of said counter.
- Claim 5. (Currently amended) The magnetic bearing control device according to claim 1, further comprising:
- a display portion for displaying a message or an image on a the basis of said signal indicating the start of maintenance operation outputted from the digital processor.
- Claim 6. (Currently amended) The magnetic bearing control device according to claim 1, further comprising:
- a voice output portion for outputting a sound on a the basis of said signal indicating the start of maintenance operation outputted from the digital processor.
- Claim 7. (Previously presented) The magnetic bearing control device according to claim 1, further comprising:

a data input device which allows a user to set said preset maintenance time.

Claim 8. (Previously presented) The magnetic bearing control device according to claim 2, further comprising:

4

a data input device which allows a user to set said preset maintenance time and said preset limit time.

Claim 9. (Currently amended) A magnetic bearing controller comprising:

a processor that controls a magnetic bearing using a magnetic bearing control signal and that generates a command signal in response to outputting the magnet bearing control signal; and a counter that accumulates and counts an actual work time of a managed component in response to receiving said command signal from said processor based upon said magnetic

bearing control signal,

wherein said processor further compares the accumulated actual work time with a preset maintenance time.

- Claim 10. (Previously presented) The controller of claim 9, wherein said processor outputs a maintenance signal based upon said comparison.
- Claim 11. (Previously presented) The controller of claim 10, wherein said processor outputs said maintenance signal when said accumulated actual work time is greater than or equal to said preset maintenance time.
- Claim 12. (Previously presented) The controller of claim 9, wherein said processor further compares the accumulated actual work time with a preset limit time.

09/891,606

DOCKET NO. K06-135818M/TBS

5

(Currently amended) The controller of claim 12, wherein said processor inhibits Claim 13. activation of said magnetic bearing based upon the comparison of said accumulated actual work time with said a preset limit time.

(Previously presented) The controller of claim 13, wherein said processor inhibits Claim 14. activation of said magnetic bearing when the accumulated actual work time is greater than or equal to said preset limit time.

(Previously presented) The controller of claim 9, further comprising a display that Claim 15. is responsive to display a maintenance signal based upon said comparison.

(Previously presented) The controller of claim 9, further comprising a notification Claim 16. device that is responsive to display a maintenance signal based upon said comparison.

(Previously presented) The controller of claim 9, further comprising a data input Claim 17. device adapted to receive said preset maintenance time.

(Currently amended) A method for controlling a magnetic bearing comprising: Claim 18. controlling said magnetic bearing using a processor that provides a magnetic bearing control signal;

generating a command signal using the processor in response to providing said magnetic

6

bearing control signal;

receiving the command signal in a counter;

counting and accumulating an actual work time of said magnetic bearing using said a counter that counts and accumulates the actual work time in response to receiving the command signal based upon said magnetic bearing control signal; and

comparing said actual work time and a preset maintenance time using said processor.

- Claim 19. (Previously presented) The method of claim 18, further comprising outputting a maintenance signal based upon said comparison.
- Claim 20. (Currently amended) The device of claim 1, wherein said <u>command signal</u>

 <u>comprises</u> digital processor outputs an instruction to the counter to count the actual work time in response to outputting the magnetic bearing control signal to the magnetic bearing.
- Claim 21. (Previously presented) The device of claim 20, wherein the counter initiates counting in response to the instruction from the digital processor to count the actual work time.
- Claim 22. (Previously presented) The device of claim 3, wherein the counter initiates counting of the actual work time in response to the magnetic bearing control signal being output to the magnetic bearing.

7

Claim 23. (Canceled).

Claim 24. (Currently amended) The controller of claim 9 23, wherein the command signal comprises processor outputs an instruction to the counter to initiate counting of the actual work time in response to the magnetic bearing control signal being output to the magnetic bearing.

Claim 25. (Canceled).

Claim 26. (Currently amended) The method of claim 18, wherein said command signal comprises further comprising providing an instruction to initiate counting of the actual work time in response to the magnetic bearing control signal being provided to the magnetic bearing.